

### Remarks

Claims 1-85 were pending in the present application. Claims 77-85 have been cancelled. New claims 86-102 have been added by this Response. No new subject matter has been added. It is respectfully submitted that the pending claims define allowable subject matter.

Claims 1-6, 8, 10-11, 15-23, 29-31, 41, 45, 46, 48, 50, 54 & 65 are rejected under 35 USC § 103(a) as being unpatentable over Reilly (USP 2003/0004463) and further in view of Hamadeh (USP 2004/0088188). Claims 5 and 19 have been rejected under 35 USC § 103(a) as being unpatentable over Reilly (USP 2003/0004463) and further in view of Hamadeh (USP 2004/0088188) and further in view of Satyamurthy (Satyamurthy, N. et al. "Electric Generators for the Production of the Positron-Emitter Labeled Radiopharmaceuticals: Where Would PET Be Without Them?" Clinical Positron Imaging. Vol. 5, No. 5: 233-253, 1999). Claims 7, 21, 26, 27-29, 31, 42, 47 and 57 have been rejected under 35 USC § 103(a) as being unpatentable over Reilly (USP 2003/0004463) and further in view of Hamadeh (USP 2004/0088188) and further in view of Critchlow (USP 6520930). Claim 30 has been rejected under 35 USC § 103(a) as being unpatentable over Reilly (USP 2003/0004463) and further in view of Hamadeh (USP 2004/0088188) in view of Critchlow (USP 6520930) and further in view of Satyamurthy. Claims 9, 12-13, 35, 36, 38, 43, 49, 51, 54, 56, 58, 61-63, 65, 66-68, 70-77, 79 and 80 been rejected under 35 USC § 103(a) as being unpatentable over Reilly (USP 2003/0004463) and in view of Hamadeh (USP 2004/0088188) in further view of Tamaki (Tamaki et al., Value of Rest-Stress Myocardial Positron tomography Using Nitrogen-13 Ammonia for the Preoperative Prediction of Reversible Asynergy, pp.1302-1310, Journal of Nuclear Medicine, vol. 30, No. 8, Aug. 1989). Claims 32, 33, 37 and 57 have been rejected under 35 USC § 103(a) as being unpatentable over Reilly (USP 2003/0004463) and in view of Hamadeh (USP 2004/0088188) in view of Critchlow (USP 6520930) and in further view of Tamaki. Claims 14, 25, 39, 44, 52, 53, 59, 60, 64, 69 and 78 have been rejected under 35 USC § 103(a) as being unpatentable over Reilly (USP 2003/0004463) and in view of Hamadeh (USP 2004/0088188) in view of Tamaki

and in further view of Kroll (USP 2005/0288869). Claims 84 and 85 under 35 USC § 103(a) as being unpatentable over Reilly (USP 2003/0004463) and in view of Hamadeh (USP 2004/0088188) in view of Tamaki and in view of Tuttle (EP0542565). Applicants respectfully traverse these rejections for reasons set forth hereafter.

Claims 1, 16, 40, 45, 55, 61 and 65 require, among other things, that the dispensing station send information regarding the doses dispensed to the plurality of PET imaging systems over the local area network.

None of the applied references teach or suggest to convey any type of information, whether it be related to doses dispensed by a dispensing station or otherwise, from a dispensing station over a LAN. More fundamentally, the applied prior art does not teach or suggest a dispensing station that is configured to support a plurality of PET systems. It necessarily follows that the applied prior art fails to teach or suggest a dispensing station that would convey information regarding doses dispensed to a plurality of PET systems over a LAN. As recognized in the outstanding Office Action, the primary reference relied on, Reilly, does not include any type of network, and thus the components in Reilly's system do NOT include any structure to convey the claimed types of information over a LAN.

Hamadeh does not make up for the deficiencies of Reilly. Hamadeh describes a method and apparatus for reconciling patient and procedural information in a medical facility computer network. Hamadeh discloses transmitting patient and patient specific procedure information to a hospital information system (HIS) or a picture archive and communication system (PACS). Hamadeh's network is structured to track individual patient information and patient workflow. The information tracked by Hamadeh is oriented to track individual patients. Hamadeh entirely lacks any reference to a multi dose dispensing station of the type claimed. Hamadeh entirely lacks any suggestion to couple a dispensing station, multi dose or single dose, to a LAN. Hamadeh entirely lacks any suggestion to convey any type of information, dose information or otherwise, from a dispensing station over a LAN. Therefore, Hamadeh's general discussion of HIS and PACS networks and transfer of patient specific records would afford NO legitimate

reason to add a multi-dose tracking network to Reilly. And more fundamentally, there is no legitimate reason to modify each component of Reilly's system, based on the teachings of Hamadeh to provide the claimed network connections between a multi-dose dispensing station, a plurality of PET imaging systems and a computer system. Hamadeh simply lacks any legitimate reason to construct the claimed network.

The additional applied references fail to make up for the deficiencies of Reilly and Hamadeh. Satyamurthy also fails to make up for the deficiencies of Reilly and Hamadeh. Satyamurthy describes a generator to produce positron emitter labeled radiopharmaceuticals. Satyamurthy does not describe a LAN, nor a dispensing station coupled to a LAN. Critchlow describes an injector system. However, Critchlow also fails to describe a LAN or dispensing station coupled to a LAN. Tamaki discusses predicted values of stress using particular PET tracers. There is no discussion of a network nor a dispensing station of the claimed type in Tamaki. Kroll discusses patient specific dosimetry but again, Kroll lacks any discussion or suggestion of a dispensing station of the claimed type coupled to a LAN for conveying the claimed information. The remaining references to Haines and Tuttle are also deficient. Thus, it is submitted that claims 1, 16, 40, 45, 55, 61 and 65 are neither anticipated nor rendered obvious by the prior art.

Regarding claim 66, the prior art lacks any teaching or suggestion to provide a dispensing station that dispenses individual doses to a plurality of PET imaging systems. The prior art further lacks the claimed plurality of delivery lines interconnected between the dispensing station and the plurality of PET imaging systems. The prior art further lacks a computer system that controls dispensing of individual doses from a multi dose vial over the delivery lines to a plurality of PET imaging systems. Reilly describes a dispensing station that is not coupled to, nor controlled to provide individual doses to, a plurality of PET imaging systems.

Regarding claims 7, 21, 26, 37, 42 and 47, it is submitted that the prior art fails to teach or suggest the provision of a mobile dispensing station to be movable between PET systems with wheels mounted thereto. Claim 86 concerns a portable medical radiopharmaceutical

administration system having, among other things, a moveable structure mounted on wheels, a multi-dose container, a dispensing station and a dose calibrator. The multi-dose container and dispensing station are coupled to one another through a liquid transfer line. The multi-dose container, dispensing station, dose calibrator and liquid transfer line are enclosed within the radioactivity shielding on the moveable structure. The prior art fails to teach or suggest any such structure.

As recognized in the prior Office Action, Reilly and Hamadeh fail to teach the use of wheels. The Office Action maintains that it would have been obvious to mount Reilly's apparatus on wheels. An absence of wheels is not the only deficiency of Reilly and Hamadeh. Among other deficiencies, Reilly and Hamadeh do not enclose a multi-dose container, dispensing station, dose calibrator and liquid transfer line all within radioactivity shielding on a common structure, mobile or otherwise. As clearly shown in Figure 4C, Reilly uses a stationary cabinet stand 300, to which container 44 and dose calibration unit 200 are mounted in separate locations. The tubing, that runs between the container 44 and the unit 200, clearly is exposed and outside of any type of shielding, and thus would emit radioactivity to the surrounding environment.

**It is illogical and without sound reason**, to suggest that the person of ordinary skill would deem it desirable to mount Reilly's stand 300 on wheel in order to move it between PET systems **which would necessarily move throughout the hallways and examination areas of a hospital**. Doing so would expose hospital patients, visitors, nurses and physicians to radioactive emissions at least from the unshielded portions of Reilly's apparatus. This is clearly contrary to safe medical practices. Instead, it is submitted that Reilly's cabinet stand 300 is stationary for a purpose, namely to be maintained in a controlled and isolated location secure from hospital patients, visitors, nurses and physicians. Thus, claims 7, 21, 26, 37, 42, 47 and 86 are neither anticipated nor rendered obvious by the prior art.

In view of the foregoing comments, it is respectfully submitted that the prior art fails to teach or suggest the claimed invention. Should anything remain in order to place the present

application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

The Commissioner is authorized to charge Deposit Account 070845 in the amount of \$490.00 for payment of the fee for a two (2) month extension of time. Applicant believes that no additional fee for claims is required. If any additional fees are required, the Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account Number 070845.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Dean Small', with a long horizontal flourish extending to the right.

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